

Patent Claims

- 5 1. Process for activation of cellulose comprising the following steps:
 - a) dissolution of cellulose in a water-containing, tertiary aminoxide,
 - b) coagulation of the dissolved cellulose by the addition of an appropriate precipitating agent and
 - 10 c) optional alkalisation of the amorphous cellulose obtained from step b).
- 15 2. Process according to claim 1, wherein aminoxides selected from the group N-methyl morpholine-N-oxide (NMMNO), N-methyl-piperidine-N-oxide, N-methyl-pyrrolidine-N-oxide, N,N-dimethylcyclohexylamine-N-oxide, N,N-dimethyl-ethanolamine-N-oxide and triethylamine-N-oxide, and water or mixtures of water and dipolar-aprotic compounds are used as the water-containing tertiary aminoxide.
- 20 3. Process according to claim 1 or 2, wherein the dissolution of the cellulose in step a) is carried out with at least one stabiliser.
- 25 4. Process according to any one of claims 1 to 3, wherein the dissolution of the cellulose in the water-containing tertiary aminoxide in step a) is carried out in the presence of a dipolar-aprotic compound.

5. Process according to any one of claims 1 to 4,

wherein the dissolution of the cellulose in step a) is carried out in the presence of compounds acting as bases, particularly in the presence of tertiary amines and/or alkaline hydroxides.

6. Process according to any one of claims 1 to 5, wherein

ethers, especially dimethyl ether, ketones, especially acetone, alcohols preferably with 1-6 carbon atoms per molecule, especially methanol, ethanol, 2-propanol or 2-methyl-2-propanol, acetonitrile and mixtures of these compounds are used as the organic precipitating agent in step b).

7. Process according to any one of claims 1 to 6, wherein

the addition of the precipitating agent in step b) is carried out stepwise.

8. Process according to any one of claims 1 to 7, wherein

the solvent in step b) contains compounds acting as bases, particularly tertiary amines and/or alkaline hydroxides and/or quaternary ammonium bases.

9. Process for derivatisation of cellulose, comprising the following steps:

- a) dissolution of cellulose in a water-containing, tertiary aminoxide,
- b) coagulation of the dissolved cellulose by the addition of an appropriate precipitating agent,

- c) optional alkalisation of the amorphous cellulose obtained from step b)
and
 - d) derivatisation of the amorphous cellulose obtained in step b) or c),
optionally in the presence of an appropriate solvent.
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10. Cellulose derivative, capable of being produced in accordance with the process according to claim 9.